

ABSTRACT

An integrating rod (200) for use with a multiple segment dynamic filter, such as a spiral dichroic color wheel having three or more narrow filters adjacent to the exit face (206) to enable the integrating rod to recapture light rejected by a given segment of the dynamic filter. The rejected light travels back through the integrating rod where a majority of the light strikes the mirrored entrance face (202). Light reflected by the mirrored entrance face, or light exiting through the entrance aperture (204) and returning to the integrating rod after being reflected by the lamp reflector, once again travels to the exit face (206) of the integrating rod (200). After exiting through the exit face (206) of the integrating rod (200) a second time, the recycled light has a good chance of striking a different filter segment of the dynamic filter and being used by the display system.